

## **Remarks**

Claims 1, 9, 11-20, 23, 24, 27 and 28 are pending in the application of which the Examiner has rejected claims 1, 9, 11-20, 23, 24, 27 and 28. By this paper, Applicant amends claim 1, cancels claims 27-28, and adds new claims 29-34. Reconsideration of the above-identified application in view of the present amendment is respectfully requested. Applicant respectfully traverses the rejections; however, amends the claims to further prosecution. No new matter has been added by the present amendment.

### ***Claim Rejections - 35 U.S.C. § 112***

#### **Rejection of claims 1, 9, 11-20, 23, 24, 27 and 28 under 35 U.S.C. § 112 ¶ 1**

Claims 1, 9, 11-20, 23, 24, 27 and 28 under 35 U.S.C. § 112 ¶ 1 have been rejected as failing to comply with the written description requirement. The Office Action stated that claims “19, 11-20, …” were rejected. The Applicant believes that the Patent Office meant claims 1, 9, 11-20, … and is responding accordingly.

Claim 1 was rejected for the limitation requiring “said first and second mechanical abutments being configured for performing adjustable stopping of the primary arc and secondary arc, respectively, at a plurality of predetermined locations relative to said single rear stationary column and said primary arc, respectively”. This limitation is removed from claim 1 and the Applicant respectfully requests that the Patent Office withdraw the rejection.

Claims 9, 11-20, 23 and 24 depend from claim 1. The limitation referenced above is removed from claim 1 and the Applicant respectfully requests that the Patent Office withdraw the rejection to the dependent claims 9, 11-20, 23, 24 and 28.

Claims 27 and 28 are cancelled.

***Claim Rejections - 35 U.S.C. § 103***

**Rejection of claims 1, 9, 11, 12, 17, 18, 27 and 28 under Coles in view of Chinomi and Alton**

Claims 1, 9, 11, 12, 17, 18, 27 and 28 have been rejected under Coles (USPN 4,402,500) in view of Chinomi (USPN 5,052,754) and Alton (USPN 5,792,031).

Claim 1 requires “the primary arc having a first end and a second end with an arcuate member extending between the ends said secondary arc having a third end and a fourth end with a second arcuate member extending between the ends”. Coles, Chinomi, and Alton do not teach an arc having two ends with an arcuate member extending between them as claim 1 requires. Coles teaches a series of rings which rotate within one another. Alton teaches a series of frame members which are annular rings which rotate within one another. Chinomi teaches a headrest assembly and does not teach rings. Therefore, Coles, Chinomi, and Alton do not teach suggest or provide all of the limitations of claim 1, and claim 1 is nonobvious over the references.

Additionally, claim 1 requires “a brake that suddenly stops said non-motorized rotary movement, said brake including at least a first mechanical abutment that suddenly stops said primary arc relative to said single rear stationary column and a second mechanical abutment for suddenly stopping said secondary arc relative to said primary arc”. A brake having a mechanical abutment is not taught by Coles, Chinomi, and Alton. Coles teaches a braking mechanism which is a disc and shoe brake or caliper style brake (Column 4, lines 26-55) which is used to slow or change the spinning and rotational rate of the device. The braking mechanism of Coles is not an abutment and does not stop the device abruptly as claimed, therefore, Coles teaches away from the limitations in claim 1. Additionally, the braking mechanism of Coles is operated by the user (Column 4, lines 50-55), which teaches away from the device as a piece of medical equipment where a medical professional would have control. Chinomi and Alton do not teach braking mechanisms. Therefore the combination of references teaches away from the limitations of claim 1, and claim 1 is nonobvious over the combination of Coles, Chinomi, and Alton.

Additionally, attached to this Amendment is a Declaration under 37 C.F.R. § 1.132 of Erik Viirre, M.D., Ph.D. MPEP § 716 states that declarations of secondary considerations of nonobviousness must be considered by the Examiner. Dr. Erik Viirre is a person having ordinary skill in the art to which this subject matter pertains, at the time the invention was made, as shown by paragraph 1 of the declaration incorporating his curricula vita. Paragraphs 1-7 establish that the claimed invention is nonobvious to one having ordinary skill in the art, and the associated unexpected results from the claimed invention. Paragraphs 5-7 discuss the Coles, Chinomi, and Alton references and offer as evidence that the combination of references does not teach, suggest, or provide for the claimed invention. The Declaration states that “[w]ith the ‘500 apparatus, the movement is random, i.e. uncontrolled, and impossible to precisely locate the person in the ‘500 (Coles) apparatus with their ear canals in a geometrical plane thereby allowing for crystal particles as small as 30µm can be ejected out of this canal.” “[T]he precise direction / orientation of the shock has to be predetermined by the doctor, and be strictly translated by the chair.” This degree of precision is necessary for a medical device providing patient treatment. In contrast, the amusement park style devices of Coles and Alton are not designed to and do not need to provide this degree of precision.

Additionally, Dr. Erik Viirre states that “[i]mportantly, the “C” arm design of the chair [the arc members] enables the examiner to stand directly beside the patient. This gives several critical affordances: direct control of the speed (fast or slow) of any given therapeutic maneuvers, direct contact with the patient to allay their anxious provoked by these actions and the ability to manually apply low-level vibration to the mastoid which facilitates the repositioning of the offending canaliths which are the cause of this disease.”

Claims 9, 11, 12, 17, and 18 depend from claim 1 and are nonobvious over Coles, Chinomi, and Alton for at least the reasons stated above with respect to claim 1, as well as for their respective limitations.

For instance, claim 9 additionally requires that “said first mechanical abutment is on one lateral side of said stationary column and is provided with a ring and a damper (B1’), said ring co-operating with a tooth of catch means arranged on the primary arc”. The Patent Office stated that “Coles discloses wherein the first mechanical abutment (38, 40) is on one lateral side of said stationary column and provided with a ring (38) and a damper (40, could act as a shock

absorber), said ring cooperating with a tooth (37) if catch means arranged on the primary arc". Coles teaches a brake with a shoe 38 and a screw 40 to adjust the shoe and change the rotation rate of the device by frictional contact with the rotating ring (Column 4, lines 26-41). There is no tooth on the ring as is required by claim 1. Chinomi and Alton do not teach an abutment with a damper and a tooth. Therefore Coles, Chinomi, and Alton do not teach, suggest, or provide all of the necessary limitation of claim 9, and claim 9 is nonobvious.

Claims 27 and 28 are cancelled.

**Rejection of claim 13 under Coles in view of  
Chinomi and Alton and further in view of Lowe**

Claim 13 has been rejected under Coles (USPN 4,402,500) in view of Chinomi (USPN 5,052,754) and Alton (USPN 5,792,031) as applied to claim 1 and further in view of Lowe (USPN 3,774,963).

Claim 13 depends from claim 1, claim 1 is nonobvious over the combination of Coles, Chinomi, and Alton as discussed above with respect to claim 1. Lowe does not teach an arc having two ends with an arcuate member extending between them, or the brake, as claim 1 requires. The combination of references does not teach suggest or provide, or in the alternative teaches away, respectively. Therefore, claim 1 and dependent claim 13 are nonobvious over the combination of references.

**Rejection of claim 14 under Coles in view of  
Chinomi and Alton and further in view of Ferrara**

Claim 14 has been rejected under Coles (USPN 4,402,500) in view of Chinomi (USPN 5,052,754) and Alton (USPN 5,792,031) as applied to claim 1 and further in view of Ferrara (USPN 3,343,875).

Claim 14 depends from claim 1, claim 1 is nonobvious over the combination of Coles, Chinomi, and Alton as discussed above with respect to claim 1. Ferrara does not teach an arc having two ends with an arcuate member extending between them, or the brake, as claim 1 requires. The combination of references does not teach suggest or provide, or in the alternative teaches away, respectively. Therefore, claim 1 and dependent claim 14 are nonobvious over the combination of references.

**Rejection of claims 15 and 16 under Coles  
in view of Chinomi and Alton and further in view of Weimer**

Claim 14 has been rejected under Coles (USPN 4,402,500) in view of Chinomi (USPN 5,052,754) and Alton (USPN 5,792,031) as applied to claim 1 and further in view of Weimer (USPN 6,264,278).

Claims 15 and 16 depend from claim 1, claim 1 is nonobvious over the combination of Coles, Chinomi, and Alton as discussed above with respect to claim 1. Weimer does not teach an arc having two ends with an arcuate member extending between them, or the brake, as claim 1 requires. The combination of references does not teach suggest or provide, or in the alternative teaches away, respectively. Therefore, claim 1 and dependent claims 15-16 are nonobvious over the combination of references.

**Rejection of claims 23 and 24 under Epley  
in view of Coles as modified by Chinomi and Alton**

Claims 23 and 24 have been rejected under Epley (USPN 6,800,062) in view of Coles (USPN 4,402,500) as modified by Chinomi (USPN 5,052,754) and Alton (USPN 5,792,031) as applied to claim 1.

Claims 23 and 24 depend from claim 1, claim 1 is nonobvious over the combination of Coles, Chinomi, and Alton as discussed above with respect to claim 1. Epley does not teach an arc having two ends with an arcuate member extending between them as claim, or the brake, as claim 1 requires. Epley teaches a ring structure. Therefore, claim 1 and dependent claims 23-24 are nonobvious over the combination of references.

**Rejection of claims 19 and 20 under Coles  
in view of Chinomi and Alton and further in view of Altare**

Claims 19 and 20 have been rejected under Coles (USPN 4,402,500) in view of Chinomi (USPN 5,052,754) and Alton (USPN 5,792,031) as applied to claim 1 and further in view of Altare (USPN 5,046,721).

Claims 19 and 20 depend from claim 1, claim 1 is nonobvious over the combination of Coles, Chinomi, and Alton as discussed above with respect to claim 1. Claim 1 requires a brake. Altare teaches a locking mechanism 200 which is engaged before or after use

of the devise, however, Altare does not teach a separate brake with a mechanical abutment as required by claim 1. The combination of references teaches away from the limitations in claim 1, or alternatively, does not teach suggest or provide all of the limitations of claim 1. Therefore, claim 1 and dependent claims 19-20 are nonobvious over the combination of references.

*New Claims*

Claims 29-33 are believed to be novel and nonobvious over Coles, Chinomi, Alton, Altarc, Epley, Weimer, and Ferrara.

Claim 29 contains limitations previously in amended claim 1, and requires a “seat theron having patient restraining means to restrain arms, shoulders, head, and lower limbs of the person in the seat”. Coles teaches that in order to use the device, the user leans/throws their body or exerts a force from their foot to the frame (Column 4, line 56 to Column 5, line 17). Chinomi teaches a headrest for a vehicle and does not teach a “restraining means to restrain ... head”. If a head restraint were used with Coles, it would render Coles unsatisfactory for its intended purpose, as the user could not lean/throw their body to use the device as taught by Coles. Alton teaches a harness 20 for restraining shoulders of a user, which would also render Coles unsatisfactory for its intended purpose as the user could not lean/throw their body to use the device as taught by Coles. Therefore, since the combination of references renders Coles unsatisfactory for its intended purpose, claim 29 is nonobvious.

***Conclusion***

In view of the foregoing, Applicant respectfully asserts that the application is in condition for allowance, which allowance is hereby respectfully requested.

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Respectfully submitted,  
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